ABSTRACT OF THE DISCLOSURE

A code division multiple access communication system comprises a source base station (BS_S), a destination base station (BS_D)having a synchronization searcher (S), and a time position estimator (100) which establishes a start position of a synchronization search window for the synchronization searcher of the destination station. In accordance with an aspect of the present invention, the time position estimator establishes the start position (SP) of the synchronization search window based on a statistical estimate of the time position at which other mobile stations previously initiated handover from the source base station to the destination base station. In a non-limiting example embodiment, the time position estimator uses an average time position (T_{new})at which other mobile stations previously initiated handover from the source base station to the destination base station as the statistical estimate. In an example illustrated embodiment, the time position estimator is situated at a radio network control node (26) of the code division multiple access communication system, but can be located at other nodes. In another aspect of the invention, the time position estimator maintains a table (110) which, for each of plural scenarios of source base stations and destination base stations, stores a corresponding scenario-specific start time position. In accordance with yet another aspect of the present invention, if the mobile station is not found at the start time position, the synchronization searcher attempts to find the transmission of the mobile station by looking at one or more search window positions which neighbor the start time position.